

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

5 Listing of Claims:

Claim 1 (Currently Amended): A counter comprising:

- 10 a plurality of state units for generating a state, each state unit having a corresponding clock end for receiving a clock having a plurality of pulses; wherein each said state unit is capable of updating the its corresponding state when receiving different pulses from the clock according to a predetermined law while each ~~of the state units~~ said state unit receives the clock from the its
- 15 corresponding clock end; and
- a clock gating circuit electrically connected to the plurality of state units for selecting at least one first state unit and at least one second state unit from the plurality of state units according only to ~~a fixed~~ an
- 20 initial value and providing a triggering clock to the clock end of each said at least one first state unit and withholding the triggering clock from the clock end of each said at least one second state unit, such that second states corresponding to each said at least one second state unit are held constant while each ~~of the~~ said at least one first state units unit updates each its state corresponding to the ~~first state units~~ said at least one first state unit according to different pulses of the triggering clock; wherein the clock gating circuit ~~not~~
- 25 providing does not provide the triggering clock to each ~~of the second state units~~ said at least one second state unit according to each state changed of the said at least
- 30

one first state unit, and ~~not withholding~~ does not withhold the triggering clock from each said at least one first state unit ~~of the first state units~~; and a latch circuit connected to the clock gating circuit for  
5 storing the initial value.

Claim 2 (Currently Amended): The counter of claim 1 wherein the clock gating circuit selects corresponding different said at least one first state ~~units~~ unit and said at least one second state ~~units~~ unit from the plurality of state units while the initial value changes.

10

Claim 3 (Currently Amended): The counter of claim 1 wherein  
15 ~~each of the state units~~ said state unit further comprises a setting end for receiving an initial state so that ~~the~~ each said state unit outputs the initial state while ~~the~~ each said state unit is first triggered by a clock pulse received from the corresponding clock end, then updates  
20 its corresponding state output when receiving a following pulse of the clock according to the predetermined law.

Claim 4 (Currently Amended): The counter of claim 3 wherein the counter is capable of setting ~~each~~ the initial state  
25 of ~~the~~ each said state unit from ~~each~~ the setting end of ~~the~~ each said state unit according to the initial value while the clock gating circuit selects ~~the~~ said at least one first state unit and ~~the~~ said at least one second state unit according to the initial value.

30

Claim 5 (Cancelled)

Claim 6 (Currently Amended): The counter of claim 1 wherein each ~~of the state units~~ said state unit further comprises a flip-flop.

5 Claim 7 (Currently Amended): A method for a counter, the counter comprising:

a plurality of state units for generating a state, each state unit having a corresponding clock end for receiving a clock having a plurality of pulses; wherein each said  
10 state unit is capable of updating ~~the~~ its corresponding state when receiving different pulses from the clock according to a predetermined law while each ~~of the state units~~ said state unit receives the clock from ~~the~~ its corresponding clock end; and  
15 a latch circuit connected to a clock gating circuit for storing an initial value;

the method comprising:

selecting at least one first state unit and at least one second state unit from the plurality of state units  
20 according only to ~~a fixed~~ the initial value and providing a triggering clock to the clock end of each said at least one first state unit and withholding the triggering clock from the clock end of each said at least one second state unit, such that second states corresponding to ~~the~~ each  
25 said at least one second state unit are held constant while each ~~of the first state units~~ said at least one first state unit updates each its state corresponding to ~~the first state units~~ said at least one first state unit according to different pulses of the triggering  
30 clock.

Claim 8 (Cancelled)

Claim 9 (Currently Amended): The method of claim 7 further comprising selecting different said at least one first state unit and said at least one second state unit from the plurality of state units while the initial value changes.  
5 ~~the at least one first state unit and the at least one second state unit according to the initial value for different initial values to select corresponding different first state units and second state units from the plurality of state units.~~

10

Claim 10 (Currently Amended): The method of claim 7 wherein ~~each of the state units~~ said state unit further comprises a setting end for receiving an initial state so that ~~the~~ each said state unit outputs the initial state while ~~the~~ each said state unit is first triggered by a clock pulse  
15 received from the corresponding clock end, then updates its corresponding state output when receiving a following pulse of the clock according to the predetermined law.

20 Claim 11 (Currently Amended): The method of claim 10 further comprising setting ~~each~~ the initial state of ~~the~~ each said state unit from ~~each~~ the setting end of ~~the~~ each said state unit according to the initial value while selecting ~~the~~ said at least one first state unit and the said at least  
25 one second state unit according to the initial value.

Claim 12 (Cancelled)

30 Claim 13 (Currently Amended): The method of claim 7 wherein ~~each of the state units~~ each said state unit further comprises a flip-flop.